IN THE SPECIFICATION:

Page 1, after the title, replace the topic heading with the following amended topic heading.

~~AREA~~ BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

Page 1, line 9, replace the topic heading with the following topic heading.

~~BACKGROUND OF THE INVENTION~~

THE PRIOR ART

Page 1, lines 11 to 19, replace the paragraphs with the following amended paragraphs.

Microphone systems are commonly constructed as a microphone unit connected to an amplifier unit which drives a device, e.g., a speaker. Most amplifiers are protected against ~~to~~too large an input signal by means of an input AGC (automatic Gain Circuit). The AGC is basically a system that can change attenuation in a way so that the maximum output signal for further processing is kept within chosen limits.

A microphone unit also often contains a ~~build-in~~built-in amplifier circuit. The ~~build-in~~built-in amplifier typically has ~~typically~~ a fixed gain which accommodates the highest sound pressure input specified for the microphone.

Page 3, lines 12 to 17, replace the paragraph with the following amended paragraph.

The invention also concerns a hearing aid with a microphone as described above. Such a hearing aid will be insensitive to the negative influences of the ultrasonic noise produced by burglar alarms, automatic door openers and other equipment which use ultrasonic emitting transducers. As described above, the AGC in a hearing aid may cause very annoying side effects to be produced when the hearing aid is subject to ultrasonic noise. The use of a microphone as described can help to avoid these ~~un-pleasant~~unpleasant side-effects.

Page 3, lines 28 to 31, replace the description of drawings with the following amended description of drawings.

Fig. 2 shows a diagram of a system having a microphone system with electrical low pass filter,

Fig. 3 displays a diagram of a system having a microphone system with acoustical low pass filter,

Page 4, lines 1, 2 and 6, replace the description of drawings with the following amended description of drawings.

Fig. 5 shows schematically a microphone with tube,

Fig. 6 shows in schematic form a microphone with tube and quarter wave resonator,

Fig. 9 is the inlet ~~in~~system of fig. 8 seen from a different angle, and

Page 5, lines 12 to 25, replace the paragraphs with the following amended paragraphs.

In Figs. 6, 7 and 8 the active element 16 within the microphone casing 15 is schematically indicated. This element 16 is not part of the novelty of the invention and is thus not disclosed in any further detail.

In fig. 7 the inlet structure is modified with a broadband quarter wave resonator suppressing ultrasound with a mean frequency corresponding to a wavelength of four times L2. The added piece of closed tube with the inclined cut off 11 which gives the filter a lower Q than in figure 6 but with a higher filter bandwidth. The closed tube/cavity 10 has only one opening, connecting the cavity with the first tube part 7,

The broadband quarter wave resonator can be implemented in several ways, but the important thing is to design it in a way so that more than one length (as with the case of L1 in fig. 6) is present in the tube. This can be accomplished by designing the end of the tube so that it represents a range of length (as in fig. 7) corresponding to suppression of a range of frequencies. ~~Ass~~As seen in fig. 7, the length L from the tube 7 to the end of tube 10 will depend on where in the cross section of the tube the length is measured.

The distribution of the length pr. area of the resonator will equal the ~~filters~~filter's band characteristic.

Page 5, line 30 to page 6, line 13, replace the paragraphs with the following amended paragraphs.

In fig. 9 a perspective view of the microphone inlet structure of fig. 8 is shown. Here the tube 10, which causes the damping of ultrasonic noise, is visible. The tube 10 branches of the tube part 7b right at the inlet to the microphone housing. As seen in fig. 9 the tube part 10 is made in the wall structure of the inlet part and open to the surroundings. The tube becomes closed once the microphone 5 is mounted with a side face which is fastened to the surface 12 of the inlet structure. The length of the tube 10 is typically in the range of 2 to 6 mm. As seen in fig. 9 the tube 10 does not have an inclined end. But due to the curvature of the tube 10, the length dimension will wary depending on cross section in which the length dimension is measured.

The microphone 5 can be glued or fastened by other means to the surface 12, only it must be assured[[,]] that the inlet 13 of the microphone 5 is placed on axis with the tube part 7b of the inlet structure.

In fig. 10 measurement results with tree different inlet systems are shown. As seen, the two resonators provide a significant increase in the attenuation of the frequencies above 35kH.